



## **Smallpox Bibliography February 2004**

1: Ann Intern Med. 2004 Jan 6;140(1):67; author reply 67.

Comment on:

Ann Intern Med. 2003 Mar 18;138(6):488-93.

Smallpox vaccination risks and public policy.

Cooper BW.

Publication Types:

Comment

Letter

PMID: 14706978 [PubMed - indexed for MEDLINE]

2: Arch Dis Child. 2003 Dec;88(12):1138.

Hugh Downman and smallpox inoculation.

Puntis JW.

Publication Types:

Historical Article

Letter

PMID: 14670797 [PubMed - indexed for MEDLINE]

3: Clin Infect Dis. 2004 Feb 1;38(3):456-8. Epub 2004 Jan 12.

Lack of vaccinia viremia after smallpox vaccination.

Cummings JF, Polhemus ME, Hawkes C, Klote M, Ludwig GV, Wortmann G.

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Although the transmission of certain viral infections (human immunodeficiency virus, hepatitis B and C viruses, and West Nile virus) through donated blood products is well described, the risk of transmitting vaccinia virus after smallpox vaccination is unknown. Blood samples from patients receiving the smallpox vaccine were obtained before vaccination; then from one-half of the study group on alternate days for each of the first 10 days after vaccination; then from all patients on days 14 and 21 after vaccination. Samples were analyzed by culture, polymerase chain reaction, and antigen detection (electrochemiluminescence) assay for the presence of vaccinia virus. Two hundred and twenty samples from 28 volunteers were processed by all 3 laboratory detection methods and all were negative for the presence of vaccinia virus (confidence interval, 0%-12.3%). Viremia with vaccinia virus after smallpox vaccination appears to be an uncommon occurrence.

PMID: 14727224 [PubMed - indexed for MEDLINE]

4: Complement Ther Med. 2003 Sep;11(3):201-2.

Smallpox inoculation--should we credit Chinese medicine?

Buck C.

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Publication Types:  
Historical Article

PMID: 14659400 [PubMed - indexed for MEDLINE]

5: Med Health R I. 2003 Nov;86(11):347-50.

One response to the threat of bioterror: smallpox vaccination.

Lonks JR.

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PMID: 14692332 [PubMed - indexed for MEDLINE]

6: Neurology. 2003 Apr 22;60(8):1241-5.

Comment in:  
Neurology. 2003 Apr 22;60(8):1228-9.

Smallpox and smallpox vaccination: neurological implications.

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Compulsory vaccination was discontinued in the U.S. in 1972; the world was declared free of smallpox infection in 1980. Since that time, no new smallpox infections have been recognized, and only limited numbers of military and laboratory personnel have been vaccinated. As a result, the majority of the U.S. and the world population have no or diminished immunity to smallpox. Widespread vaccination, beginning with the military and health care workers, is now being undertaken. Public health strategies for immunizing the general population include preexposure voluntary vaccination, case surveillance with ring vaccination, and mass vaccination at the time of attack. Cutaneous complications of vaccination occur in immunosuppressed subjects and in those with atopic dermatitis. Among the most serious complications is postvaccinal encephalomyelitis (PVEM). A related condition, postvaccinal encephalopathy (PVE), may be seen in children less than two years of age. There are no markers to predict who will develop PVEM. In the past, mortality was high, ranging from 10 to 50%. The neuropathology of PVEM suggested an immune-mediated attack on the CNS, but the target of the immune response is unknown. Comprehensive programs are needed for surveillance and confirming case definitions for neurologic complications. Multi-institutional controlled trials of antiviral and immune modulating therapy of PVEM should be considered. Neurologists should be actively involved in the planning process for vaccination programs and in the treatment of neurologic complications.

Publication Types:

Review

Review, Tutorial

PMID: 12707424 [PubMed - indexed for MEDLINE]

7: Neurology. 2003 Apr 22;60(8):1228-9.

Comment on:

Neurology. 2003 Apr 22;60(8):1241-5.

Smallpox: the threat of bioterrorism and the risk of the vaccine.

Johnson RT.

Publication Types:

Comment

Editorial

PMID: 12707420 [PubMed - indexed for MEDLINE]

8: Proc Natl Acad Sci U S A. 2003 Dec 9;100(25):15276-9. Epub 2003 Nov 25.

Evaluating plague and smallpox as historical selective pressures for the CCR5-Delta 32 HIV-resistance allele.

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The high frequency, recent origin, and geographic distribution of the CCR5-Delta 32 deletion allele together indicate that it has been intensely selected in Europe. Although the allele confers resistance against HIV-1, HIV has not existed in the human population long enough to account for this selective pressure. The prevailing hypothesis is that the selective rise of CCR5-Delta 32 to its current frequency can be attributed to bubonic plague. By using a population genetic framework that takes into account the temporal pattern and age-dependent nature of specific diseases, we find that smallpox is more consistent with this historical role.

PMID: 14645720 [PubMed - indexed for MEDLINE]

9: Sci Am. 2004 Jan;290(1):18, 20.

Uncertain threat. Does smallpox really spread that easily?

Sinha G.

Publication Types:  
News

PMID: 14682033 [PubMed - indexed for MEDLINE]

10: Ultrastruct Pathol. 2003 May-Jun;27(3):133-40.

Bioterrorism and electron microscopic differentiation of poxviruses from herpesviruses: dos and don'ts.

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With increased threat of terrorism, much attention is being directed toward readiness for biodefense. Smallpox virus, a deadly and much feared organism, is among possible bioterrorism agents. Herpesviruses, such as the one that causes chickenpox and shingles, produce skin lesions that may resemble those seen early in smallpox infection. Electron microscopy (EM) is a rapid and reliable method for differentiating poxviruses from herpesviruses. However, before becoming involved in the monitoring of potential smallpox cases, a laboratory must consider several issues, including expertise in virus identification, capacity for handling biohazards, and health and immune status of laboratory staff.

PMID: 12775503 [PubMed - indexed for MEDLINE]

